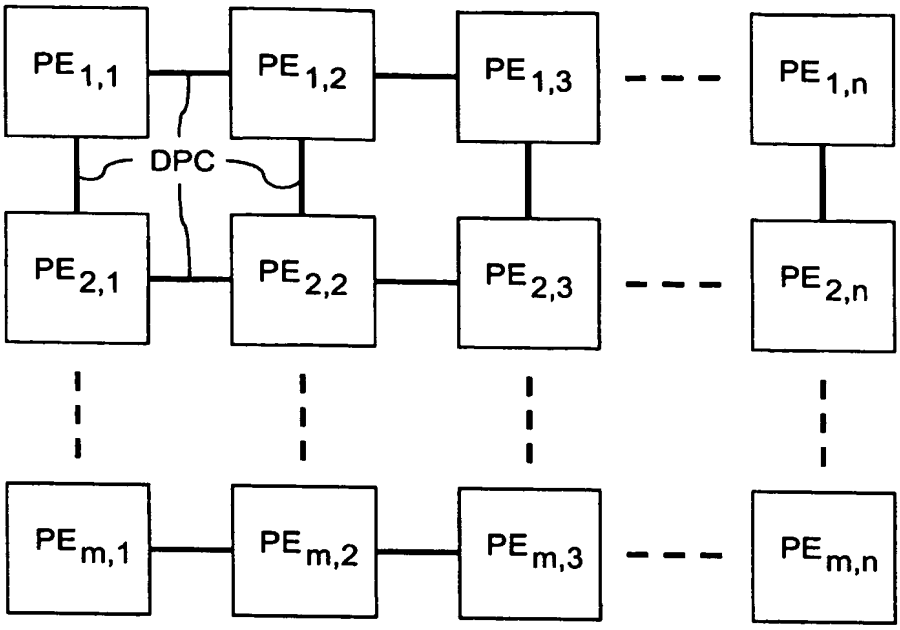
PE1,1
PE1,2
PE1,3
PE1,n
DPC
PE2,1
PE2,2
PE2,3
PE2,n
PEm,1
PEm,2
PEm,3
PEm,n

FIG.1

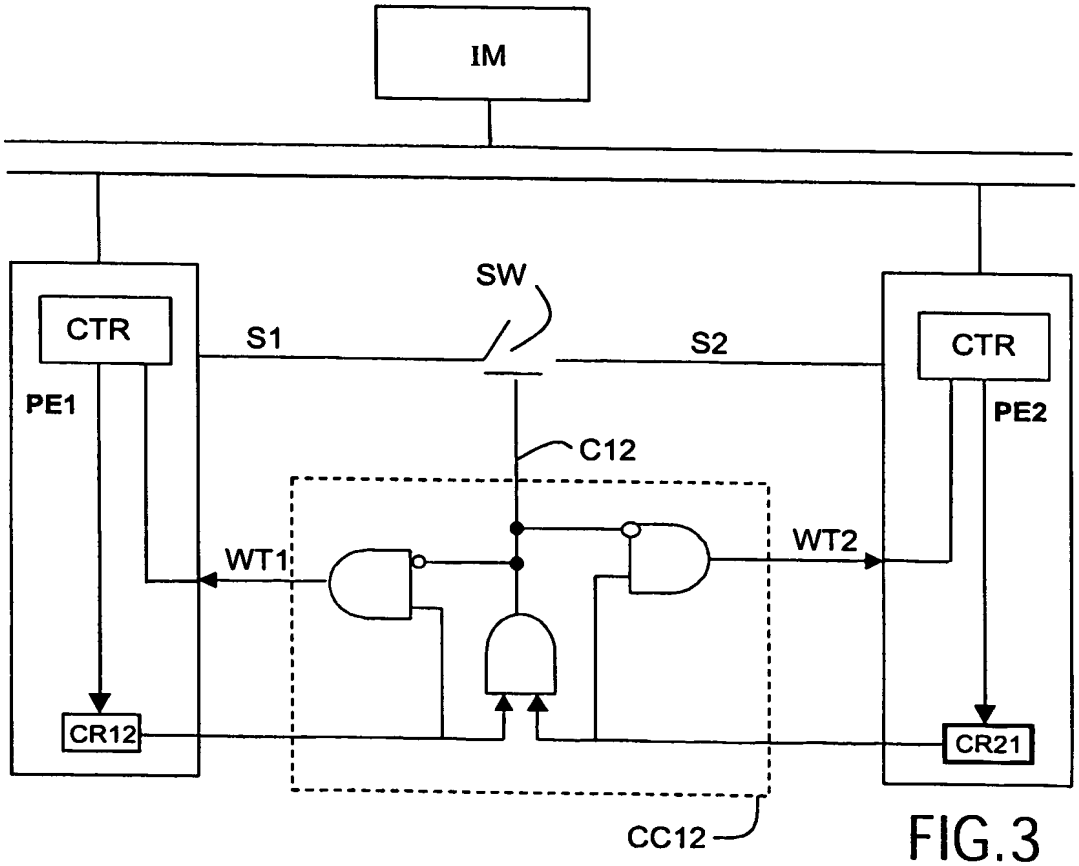
IM
SW
CTR
S1
S2
CTR
PE1
PE2
C12
WT1
WT2
CR12
CR21
CC12

FIG.3

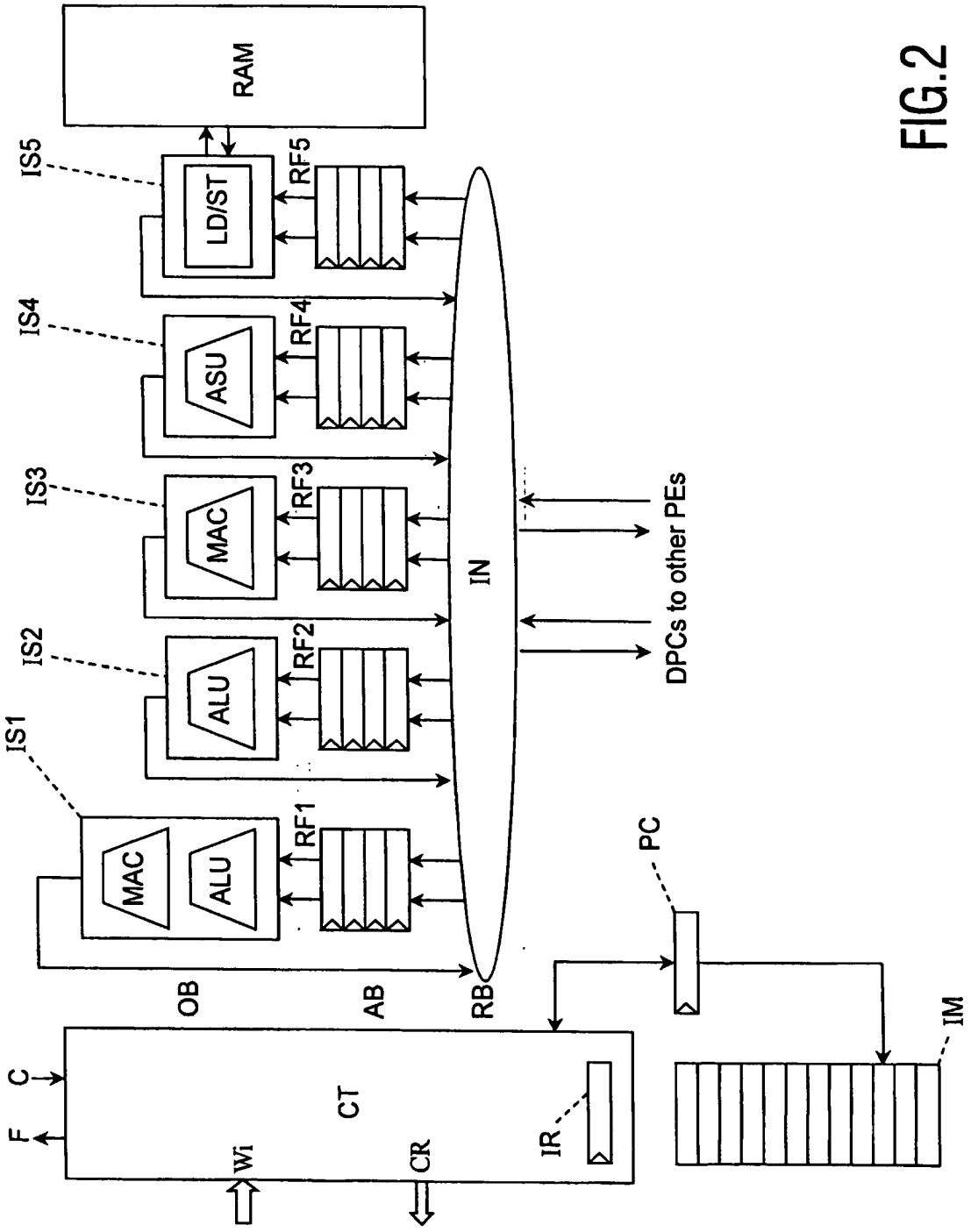
RAM
IS5
LD/ST
RF5
IS4
ASU
RF4
IS3
MAC
RF3
IS2
ALU
RF2
IS1
MAC
ALU
RF1
IN
DPCs to other PEs
PC
IM
OB
AB
RB
C
F
CT
Wi
CR
IR

FIG.2

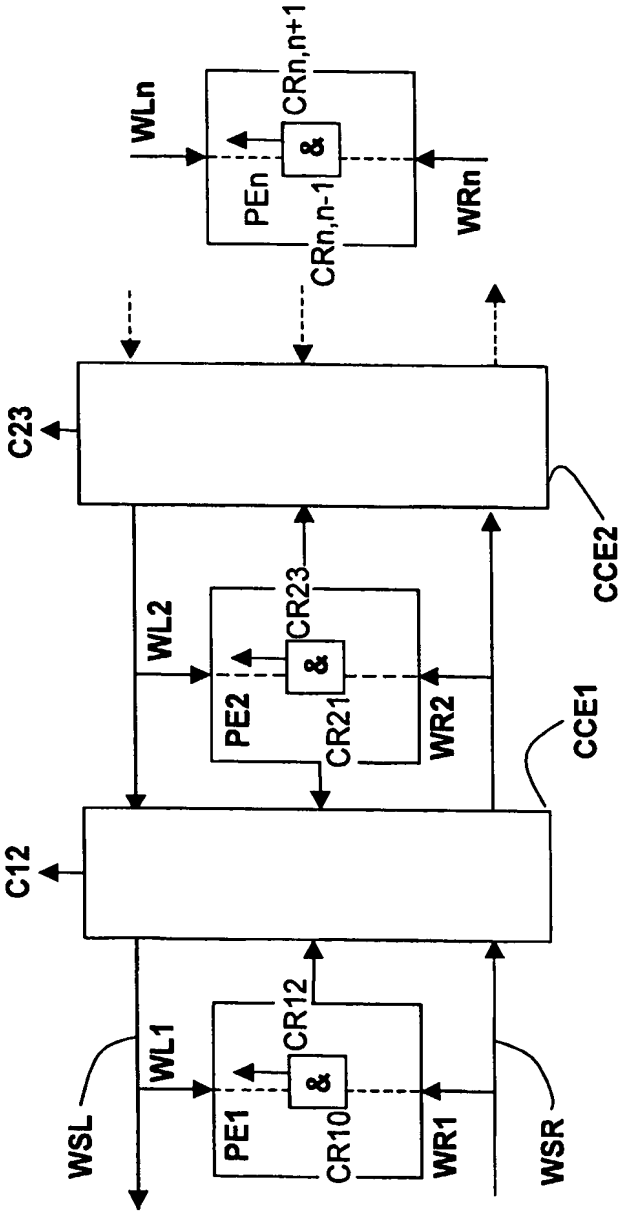
WLn
CRn,n+1
&
PEn
CRn,n-1
WRn
C23
CCE2
WL2
CR23
&
PE2
CR21
WR2
CCE1
C12
WL1
CR12
&
PE1
CR10
WR1
WSL
WSR

FIG.4

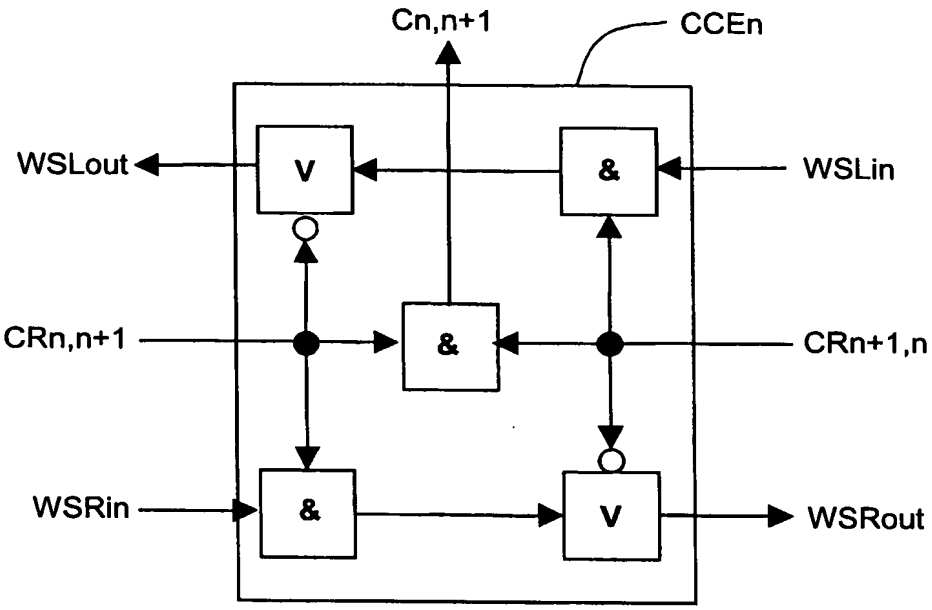

FIG.5

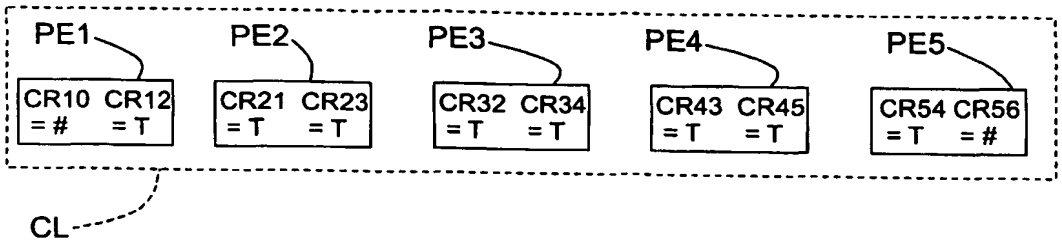

FIG.6A

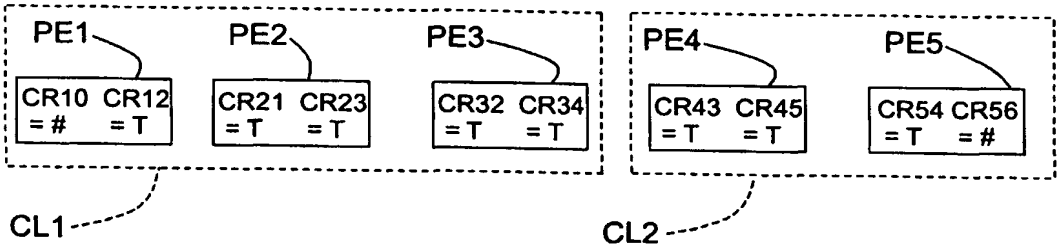

FIG.6B

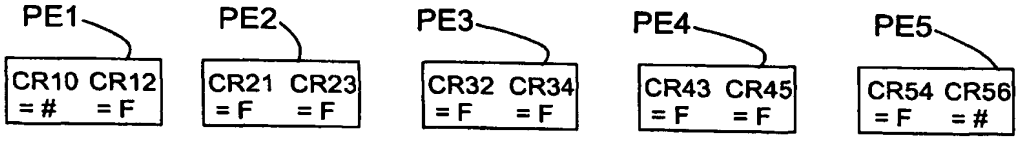

FIG.6C

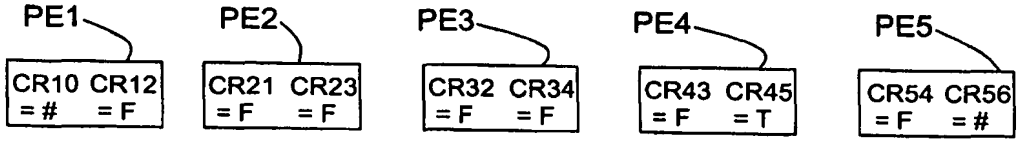

FIG.6D

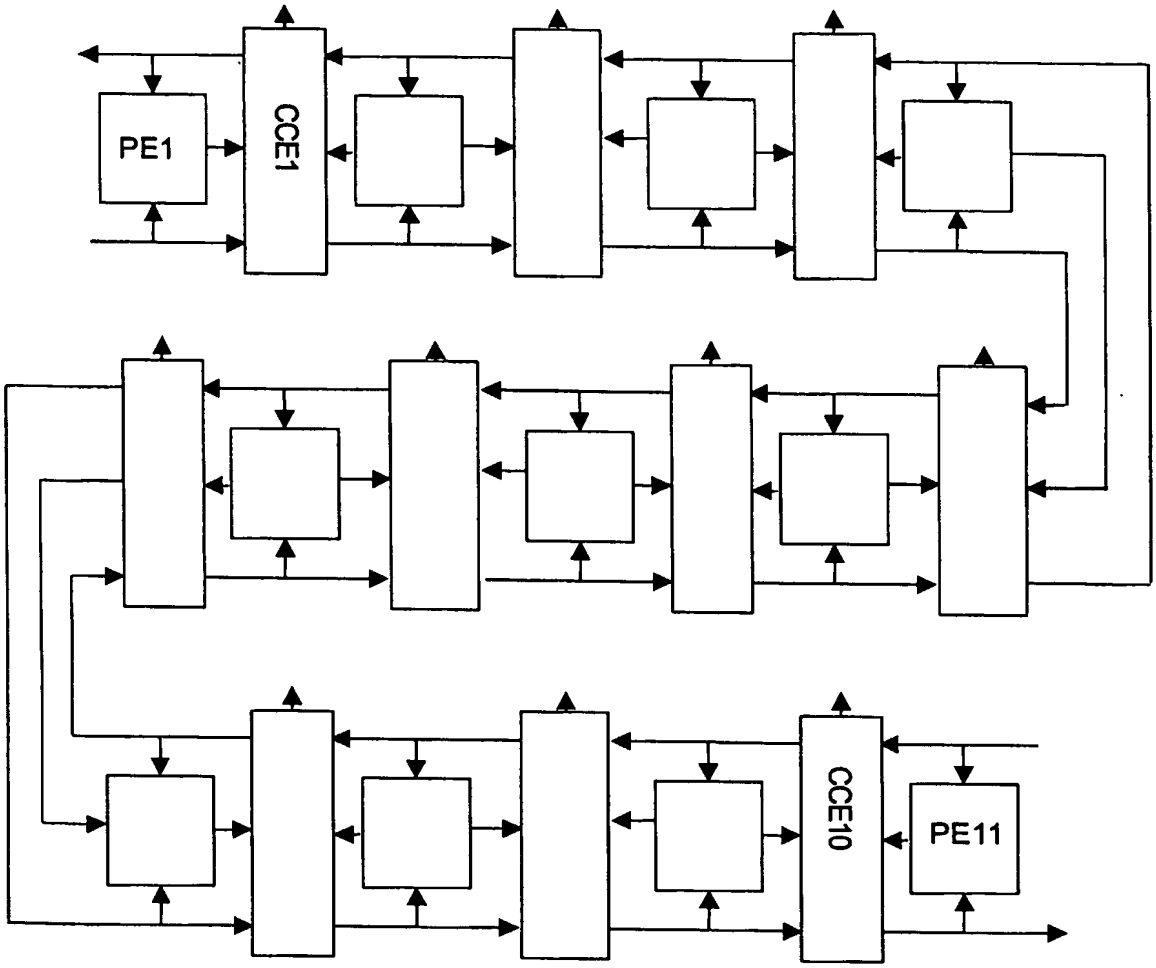

FIG.7

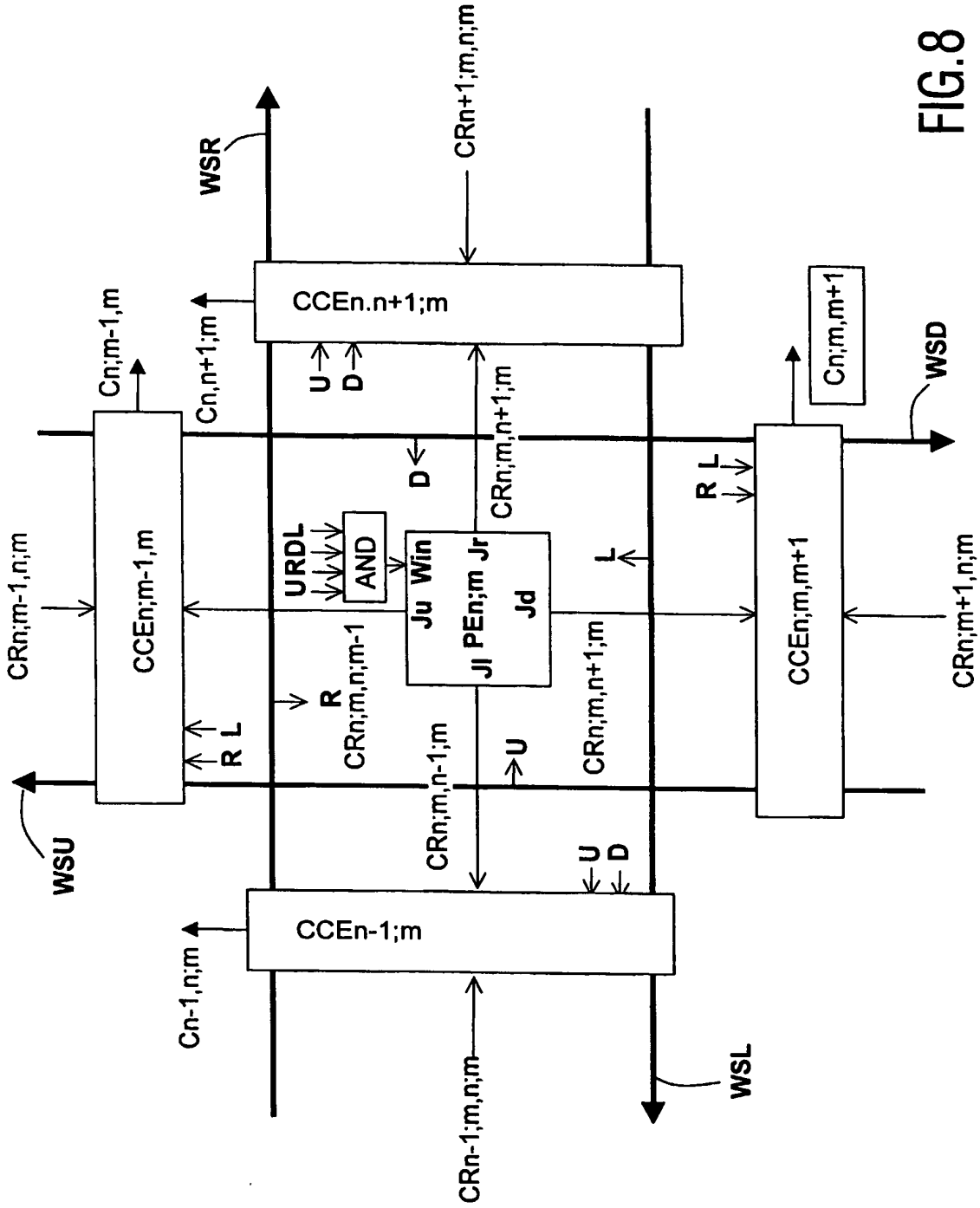
WSR
CRn+1;m,n;m
CCEn.n+1;m
Cn;m-1,m
Cn,n+1;m
U
D
Cn;m,m+1
WSD
D
CRn;m,n+1;m
R L
URDL
AND
Ju Win
JI PEn;m Jr
Jd
L
CRn;m-1,n;m
CCEn;m-1,m
CCEn;m,m+1
CRn;m+1,n;m
R
CRn;m,n;m-1
R L
U
CRn;m,n+1;m
CRn;m,n-1;m
U D
WSU
CCEn-1;m
Cn-1,n;m
CRn-1;m,n;m
WSL

FIG.8

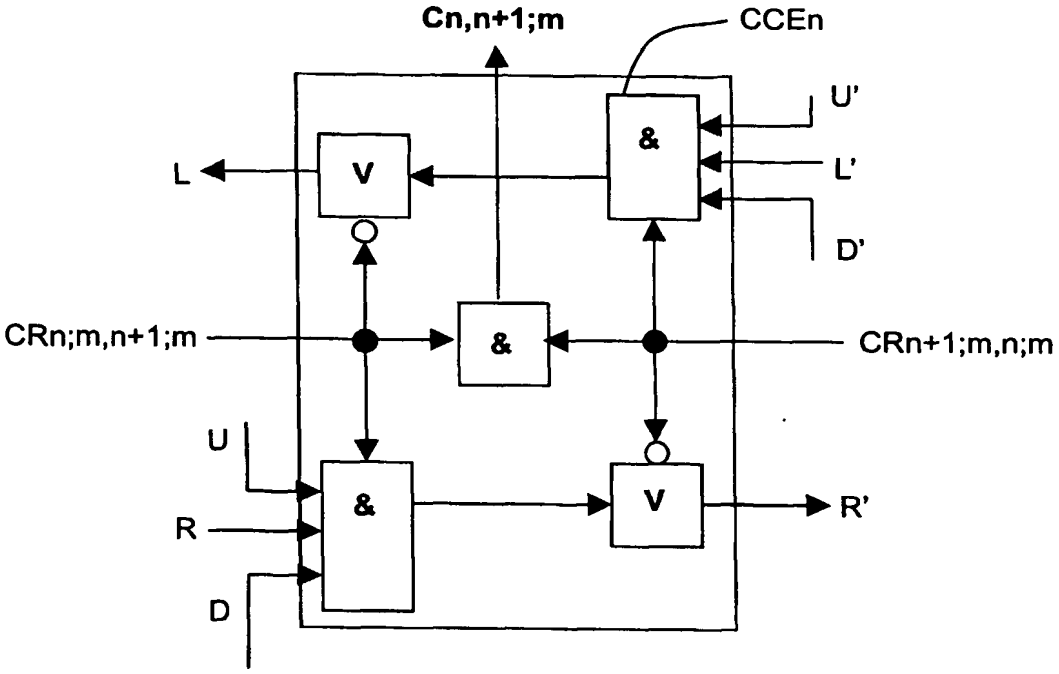

FIG.9

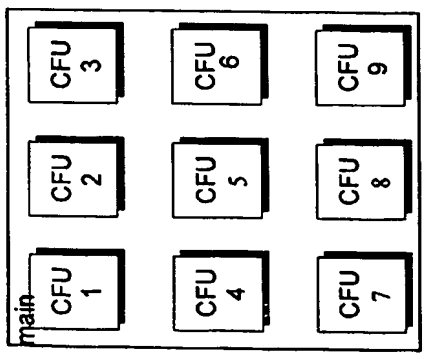

FIG.10A

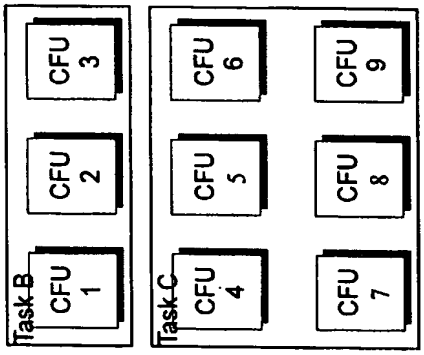

FIG.10B

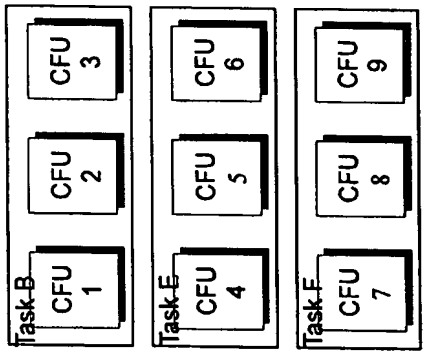

FIG.10C

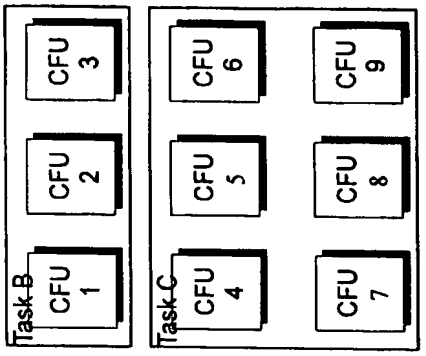

FIG.10D

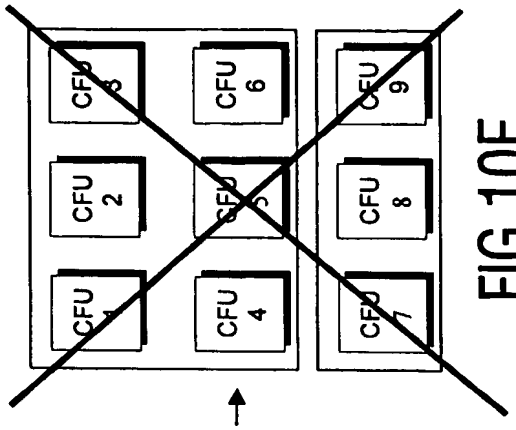

FIG.10E

```
Main
      {
       Var1 = Func1()
       If  (Var1)
       Then
         Execute Task A
       Else
         Execute Task B in Parallel with Task C
      }

    Task A
      {
       ...
      }

    Task B
      {
       ...
      }

    Task C
      {
       Var2 = Func2()
       If  (Var2)
       Then
         Execute Task D
       Else
         Execute Task E in Parallel with Task F
      }

    Task D
      {
       ...
      }

    Task E
      {
       ...
      }
    Task F
      {
       ...
      }
```

FIG.11